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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,080	11/17/2003	Gregg M. Sichner	ROKZ 2 00005	4867

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EXAMINER

TA, THO DAC

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/716,080	SICHNER ET AL.	
	Examiner	Art Unit	
	Tho D. Ta	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,11-19,23 and 24 is/are rejected.
- 7) ☒ Claim(s) 3-10,20-22 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/13/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 11-13, 16-19, 23, 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Lieb et al. (6,634,910).

In regard to claim 1, Lieb et al. discloses a modular electrical device comprising: a modular base comprising a plurality of base components 2, 3 adapted to be arranged relative to each other so as to define a backplane 1 (see fig. 1) comprising at least one module mounting location (is a combination of one penetration 19 of the base component 2 and another penetration 19 of the adjacent base component 3), wherein the at least one mounting location comprises a first electrical base connector 26 of one base component 2 and a second electrical base connector 26 of another base component 3; at least one removable module 4 adapted to be respectively removably connected to the backplane 1 in the at least one mounting location, the at least one module 4 comprising: (i) a first module connector 31 adapted to be mated with the first electrical base connector 26 to form a mated pair of first connectors 26, 31; and, (ii) a second module connector 31 adapted to be mated with the second electrical base

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connector 26 to form a mated pair of second connectors 26, 31, wherein the module 4 is adapted to electrically interconnect the first and second electrical base connectors 26 of the at least one mounting location; a coupling device (column 5, lines 43-54) connected to the backplane and located in the at least one mounting location, the coupling device adapted to releasably secure the at least one module 4 to the backplane 1.

In regard to claim 2, Lieb et al. discloses that a plurality of seals, wherein at least one seal 38 is located between and sealingly engaged with the mated pair of first connectors 26, 31, and wherein at least one seal 38 is located between and sealingly engaged with the mated pair of second connectors 26, 31 to inhibit ingress of contaminants between the mated pair of first connectors 26, 31 and the mated pair of second connectors 26, 31 (column 6, lines 1-11 and figures 3a, 4).

In regard to claim 11, Lieb et al. discloses that each of the seals 38 comprises a radial sealing element for sealing radially adjacent surfaces and an axial sealing element for sealing axially adjacent surfaces for each mated pair first connectors 26, 31 and each mated pair of second connectors 26, 31 (see fig. 4).

In regard to claim 12, Lieb et al. discloses that the first and second base connectors 26 are male plug connectors and wherein the first and second module connectors 31 are female socket connectors.

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In regard to claim 13, Lieb et al. discloses that the first and second module connectors 31 comprises a socket including one of the seals 38 located therein.

In regard to claim 16, Lieb et al. discloses that the radial sealing element of each seal 38 comprises at least one continuous radial lip 37 that projects radially inward from a peripheral wall of the seal 38 toward a central region of the socket 31, and wherein the axial sealing element of each seal 38 comprises at least one continuous axial lip (the distal end portion of seal 38, see fig. 3a) that projects from an inner wall of the seal 38 axially outward toward an entrance of the socket 31 (see figures 3c and 4).

In regard to claim 17, Lieb et al. discloses that each of the seals 38 comprises an L-shaped cross-section (see fig. 4).

In regard to claim 18, Lieb et al. discloses that the first and second base connectors 26 are female socket connectors and wherein the first and second module connectors 31 are male plug connectors.

In regard to claim 19, Lieb et al. discloses that the at least one module 4 comprises an outer housing 29 and an inner housing 35 received within the outer housing 29.

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In regard to claim 23, Lieb et al. discloses a modular base for an electrical device, the modular base comprising: at least two separate base components 2, 3 adapted for selective mechanical mating via corresponding male and female portions 15, 16 so as to define a backplane 1 that comprises at least one module mounting location, wherein each of the at least two base components 2, 3 comprises at least one electrical connector 26, and wherein the at least one mounting location comprises first and second electrical connectors 26 that form a pad of respective first and second ones of the at least two base components 2, 3.

In regard to claim 24, Lieb et al. discloses that at least one of the releasably engages and base components 2, 3 comprises a module coupling device (column 5, lines 43-54) that retains an associated module 4 mounted to the backplane 1 in one of the at least one mounting locations.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lieb et al.

In regard to claim 14, Lieb et al. discloses that each of the seals 38 comprises a one-piece molded insulative construction.

However, Lieb does not disclose the type of the insulative material of the seal 38.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lieb et al. invention by constructing the seal of a polymeric material since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416 (CCPA 1960).

In regard to claim 15, Lieb et al. discloses that each socket 31 comprises a plurality of flow passages 36, and wherein the seal 38 is molded into and mechanically anchored to the flow passages 36 (see figures 3b and 3c).

Allowable Subject Matter

5. Claims 3-10, 20-22, 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: In regard to claim 3, the prior art fails to provide, teach or suggest the coupling device comprises a movable lock member that engages the at least one coupling projection; and in combination with all of the limitations of the base claim and any intervening claims. In regard to claim 20, the prior art fails to provide, teach or suggest one of the inner and outer housings comprises projecting tabs and the other of the inner and outer housings comprises recesses that respectively receive the projecting tabs when the inner housing is received within the outer housing; and in combination with all


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of the limitations of the base claim and any intervening claims. In regard to claim 22, the combination of claim 22 and 1 would render the claim unobvious over the prior art because it would not have been obvious to modify Lieb et al. to include the puzzle-piece structures. In regard to claim 25, the prior art fails to provide, teach or suggest the spring-loaded lock member; and in combination with all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tdt
08/17/04


THO D. TA
PRIMARY EXAMINER